

EXHIBIT 4



NASSAU COUNTY DEPARTMENT OF HEALTH

240 OLD COUNTRY ROAD
MINEOLA, N.Y. 11501County Executive
JOHN J. DOWLING, M.D., M.P.H.
Commissioner
FRANCIS V. PADAR, P.E.
Asst. Deputy Commissioner
Div. of Environmental Health

November 5, 1975

Summary of Groundwater Quality - Grumman Aerospace Corporation

A most serious instance of Magothy aquifer contamination is now evident at the Grumman Aerospace Corporation where four of fourteen wells approach or exceed the New York State nitrate limit of 10.0 mg/l, six wells show high levels of ammonia, five wells indicate objectionable odors of a hydrocarbon nature and thus far two wells reveal the presence of organic contaminants.

While elevated levels of nitrates are not uncommon in the Magothy aquifer in the central portion of Nassau County, ammonia detection is unusual and indicative of more direct sewage contamination. Detection of phenols and odors of a hydrocarbon nature, along with the detection by the Grumman Corporation of such organic contaminants as methane, ethylene, and vinyl chloride and detection also of vinyl chloride and tri and tetra-chlorethylene by the New York State Health Department, indicate direct contamination of water supply wells by industrial wastes.

The discharge of sanitary wastes in the vicinity of the Grumman Corporation and the discharge of industrial wastes, particularly those previously discharged by the Hooker Chemical Corporation, is considered responsible for the degradation in quality of Grumman Corporation wells. Further analyses and study are needed, however, to determine more precisely the extent of contamination of groundwater by organics and what the future implication of this contamination are on Corporation wells and on nearby municipal water supplies.

Background

The Grumman Aerospace Corporation, located in Bethpage, has fourteen active wells used in one distribution system for consumption, processing, and air conditioning. (See Attachments I, and II) Since 1964, however, thirteen wells have been replaced due to problems of deterioration and odor.

Although Department water quality data exists for many wells dating to 1962, routine annual sampling of all wells did not begin until 1972. Because of the increased levels of nitrates, ammonia, and hydrocarbon odors noted at some wells, special sampling was conducted in December 1973, and January 1974, for those constituents as well as for phenols. At that time, samples were collected periodically during continuous well operation. Phenols were not detected then, but high nitrate, ammonia, and odor levels were reconfirmed in the problem wells.

In March 1974, the Environmental Protection Agency, at the request of the Health Department, conducted sampling for organics at Wells 6, 8, and 14 with negative results. Sampling was also conducted at two Grumman sewage plant (A & B) recharge basins with positive vinyl chloride results, and at the adjacent Hooker Chemical Corporation condenser water and PVC lagoons. Traces of tri and tetra-chlorethylene and larger amounts of octyl alcohol and vinyl chloride were found at the condenser water lagoon, while large amounts of vinyl chloride and acetic acid were found at the PVC lagoon. In May 1974, the Environmental Protection Agency recommended that further samples be taken to determine just what type of organic contamination was present at the wells.

Problems of high nitrate, ammonia, and odor continued through the annual sampling of wells in 1975. In addition, the presence of phenols was confirmed at four wells. The New York State Department of Health in October 1975 completed the analysis of two well water samples and a waste water sample from the Hooker Chemical Corporation for organics. The results indicated the presence of a variety of contaminants in the wells, identical to those found in industrial wastewater formerly discharged to adjacent lagoons.

Water Quality Problems

A listing of Department of Health sampling results for each active well is provided in Attachment No. 3. Table I indicates the pumpage, depth and concentration of constituents which indicate degraded water quality. The following is a summary by constituent of the extent of the water quality problem at Grumman Corporation wells.

Nitrates

Nitrate levels approaching or above the New York State Drinking Water limit of 10.0 mg/l are evident at four wells (Nos. 5, 6, 8, and 10) ranging in depth between 350 - 400'. Nitrate contamination of the Magothy aquifer has been observed through various central portions of Nassau County and is indicative of long-term sewage contamination of groundwater. The detection of high levels at wells in close proximity may, however, signify the effect of localized discharges of sewage in a greater magnitude than normal for similar unsewered areas of the central portion of the County.

Ammonia

Ammonia levels above 0.01 mg/l have been detected since 1973 at six wells (Nos. 3, 5, 6, 8, 10, and 14) ranging in depth from 350 - 550'. Four of these wells also exhibited high nitrate levels. Detection of appreciable concentrations of free ammonia is usually indicative of "fresh pollution" of sanitary significance. Detection of ammonia levels above 0.002 mg/l in the Magothy aquifer in the central portion of the County - the primary groundwater recharge area - is unusual and also indicates discharge of large quantities of sewage in proximity to the Corporation wells.

Phenols

Phenol levels at or above 0.002 mg/l have been detected at four wells (Nos. 4, 8, 9, and 14) since 1974. These wells vary from 350 - 470' in depth. Phenols in the low concentrations detected are known to cause undesirable tastes when chlorination is applied. At slightly higher levels (.01 - .1 mg/l) phenols can be detected by an odor test. Since concentrations affecting health, however, are far removed from levels causing taste problems, the New York State Department of Health has removed a limit of 0.001 mg/l from the Drinking Water Standards.

Detection of phenols is indicative of waste discharge by industries using the substance as a raw material. Phenols are used extensively in the synthesis of organic products, particularly phenolic-type resins.

Odor

Odors reported in tests of water from five wells (Nos. 5, 6, 8, 9, and 14) have been described as being similar to paint or of hydrocarbon origin and disagreeable in nature. At two wells (Nos. 5 and 6), the odor is noted only in the field and present at wells which have moderate to high (.08 - .28 mg/l) levels of ammonia. At two other wells (Nos. 8 and 14), odors have been confirmed in laboratory analysis and are noted where the State Department of Health has detected organic contaminants of 104 and 615 ug/l (as tri-chloroethylene), and significant ammonia and phenol levels have also been detected.

Organic Contaminants

The detection of phenols and odors at Grumman wells has been described previously. Prime evidence of organic contamination of wells is indicated by a report from the Grumman Corporation itself of the detection of methane, ethylene, and vinyl chloride at Well Nos. 8 and 9 and by the following New York State Department of Health analysis results, reported on October 2, 1975:

	<u>mg/l as Tri-Chloroethylene</u>
Well No. 8	0 vinyl chloride
	16 tri-chloroethylene
	88 tetra-chloroethylene
Well No. 14	50 vinyl chloride
	500 tri-chloroethylene
	65 tetra-chloroethylene
Hooker Chemical Waste	50 vinyl chloride
Water	25 di-chloroethylene
	80 tri-chloroethylene
	8600 tetra-chloroethylene

Miscellaneous amounts of other hydrocarbons were also detected.

Both Wells Nos. 8 and 14 are no longer used for routine supply purposes because of odors which are particularly apparent after prolonged pumpage.

The Hooker Chemical Waste Water Samples were composed of 50% lagoon water residue and 50% pre-incineration waste water. The use of waste water lagoons for on site waste water disposal was discontinued over nine months ago. All wastes are now incinerated at the site with zero discharge of waste water. Previous discharge from the Hooker Chemical Corporation was considered to be the most likely source of contamination of Grumman Aerospace Corporation wells by organic wastes.

Resampling of Wells Nos. 8 and 14, the sampling of additional Corporation wells, and sampling of adjacent municipal water supply sources will be conducted on November 17, 1975 for organic constituents.

Guidance has been solicited from the State Department of Health and the Environmental Protection Agency concerning recommended drinking water limits for waters containing the organic contaminants thus far detected. This is particularly necessary in view of vinyl chlorides associated with the development of liver cancer.

Analysis for Cyanide (CN) has been negative (<0.007 mg/l) in all analysis conducted thus far at the Grumman Wells.

Heavy Metals

Analysis for copper, zinc, lead, cadmium, aluminum, total chromium, and hexavalent chromates have been conducted at each well. All analysis for cadmium have been negative (<0.005 mg/l), as they have been for aluminum (<0.5 mg/l), total chromium (<0.01 mg/l), and hexavalent chromates (<0.01 mg/l).

Copper levels above 0.05 mg/l have been detected in many wells, but only at Well No. 10 at a level above 0.20 mg/l. Zinc has been detected at the five wells sampled (Nos. 6, 8, 9, 14, and 16) at concentrations varying from 0.06 - 0.10 mg/l. Lead has been detected at Well No. 15 at a level of 0.02 mg/l. It has not been determined whether the low levels detected of copper and zinc are, or are not, attributable to internal well corrosion. The encounter of lead, copper, and zinc will be subject to further observation and verification.

MJA:el
11/5/75

NGINS000619198

TABLE I
GRUMAN WATER SUPPLY INFORMATION

Well No.	N No.	Water Quality Problems*					Depth	1974 Pumpage (MGD)
		Nitrates (mg/l)	Ammonia (mg/l)	Phenols (mg/l)	Odor (mg/l)	Heavy Metals (mg/l)		
1	8842						570	1.15
2	8154					**	520	1.42
3	8124		.002 - .032			**	544	0.39
4	1923			<.002 - .003		**	359	0.05
5	7635	.69(1966)- 9.2(1974)	.03 - .08		hydrocarbon (field only)	**	394	1.16
6	7534	10.6(1973), 6.9-9.5	.12 - .28		hydrocarbon (field only)	**	366	0.32
8	7535	8.0 - 11.0	.002 - .026	<.002 - .004	2D, 2-3H	0 vinyl Chloride 16 Tri-Chloroethylene 88 Tetra-Chloroethylene	357	0.28
9	7536			<.002 - .005	1H	**	436	0.63
10	7636	6.9 - 16.0	.002 - .018			Cu .12-.27	373	0.61
1	7637					**	490	0.57
13	8454					**	560	1.09
14	8443		<.002-.40 (1973)	<.002- .002	2D, 1D (1973)	50 vinyl Chloride 500 Tri-Chloroethylene 65 Tetra-Chloroethylene	467	0.06
15	8816					Pb .02	500	0.52
16	7518					**	375	0.29
								<u>2.64 (Total)</u>

Footnote:

* All levels or values indicated are representative of analysis conducted since 1974 unless otherwise indicated.

** Analysis not yet conducted by the New York State Department of Health

MJA: tk Nov. 5, 1975

NGINS000619199

Cable Address "NYTESLA" NEW YORK

Lab. No.
75-47903

NEW YORK TESTING LABORATORIES, INC.

81 URSAN AVENUE, WESTBURY, L.I., N.Y. 11590 • P.O. BOX 484 • (212) 297-1449 • (516) 334-7779

REPORT OF TESTS

December 17, 1975

Lab. No. & Client -- 75-47903 - Grumman Aerospace Corp.
 Material -- Two (2) Water Samples Received 12/10/75
 Client's Order No. -- Pending
 Identification -- As below
 Submitted for -- Chemical Analysis

We find as follows:

	#1 Plant #3	#2 Plant #2
Nitrate, mg/l	6.4*	5.4
Fluoride, mg/l	0.22	1.30
Aluminum, mg/l	0.08	0.04
Sulfide, mg/l	ND 0.10	-
Copper, mg/l	0.100	0.100
Sulfate, mg/l	ND 1	33
Silicate, mg/l	2.90	3.25
Surfactants, ABS, mg/l	ND 0.02	ND 0.02
Total Chromium, mg/l	-	0.033
Hexavalent Chromium, mg/l	-	ND 0.005
Phenols, mg/l	-	0.170*
Nickel, mg/l	-	ND 0.040
Borate, mg/l	-	ND 2.05
Cyanide, mg/l	-	3.615
Cadmium, mg/l	-	0.009

ND = None detected, less than

We certify that this report is a true report
 of results obtained from our tests of this
 material.

Respectfully submitted,

NEW YORK TESTING LABORATORIES, INC.

To:
 Grumman Aerospace Corp.
 Plant 3, Dept. 309
 Bethpage, N. Y. 11714
 Attn: Mr. R. A. Jasinkonis
 ee

G.J. Horvitz, Chief Officer

Report on sample by client applies only to sample. Report on samples by us applies only to lot sampled.
 Information contained herein is not to be used for reproduction except by special permission.
 Samples retained for thirty days maximum after date of report unless specifically requested otherwise by client.
 The liability of the New York Testing Laboratories, Inc. with respect to the services charged for herein shall in
 no event exceed the amount of the invoice.

FORM 100-28

NGINS000619200

BRUMMAN

MEMORANDUM

CHECK (✓) BOXES
AS APPROPRIATEACTION.....☐
INFO ONLY.....☐
REPLY REQUESTED...☐FROM: F. Scott *SL*

DATE 22 March 1977

TO:

NAME GROUP NO. & NAME PLANT NO. COMPANY EXT.

R. Jasinkonis *JPJ*

NO.

SUBJECT:

PHENOLIC WASTE TREATMENT

Reference: Hugh R. Eisenhauer, "Oxidation of Phenolic Wastes", Journal W.P.C.P.,
Vol. 36 mo. #9 Sept. 1964

Phenolic wastes are destroyed by oxidizing them to biodegradeable muconic acid by the use of 50% hydrogen peroxide and a ferrous salt at a pH between 3 and 4. The amount of hydrogen peroxide and ferrous salt used is dependent upon the quantity of phenol present. Optimum results are obtained when one (1) mole of ferrous salt and three (3) moles of 50% hydrogen peroxide are used for each mole of phenol present. Any other reducing agents which may be present will increase the quantities of chemicals needed.

FS:w



STATE OF NEW YORK • DEPARTMENT OF HEALTH

TOWER BUILDING • EMPIRE STATE PLAZA • ALBANY, N.Y. 12201

ROBERT P. WHALEN, M.D.
COMMISSIONER

DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

G. WOLFGANG FUHS, Dr. sci. nat.
DIRECTOR

May 19, 1977

Mr. Albert Machlin
NYS Department of
Environmental Conservation
Building 40
State University of New York
Stony Brook, New York 11790

Dear Mr. Machlin:

At the request of Dr. Fuhs, we have reviewed data on six miscellaneous waste samples collected on January 4, 1977 in Nassau County. The original report on these samples described qualitative findings obtained by gas chromatography-mass spectrometry. It is my understanding a report of these findings is in your possession. The additional data we report via this memo is based on quantitative estimates obtained from the gas chromatograms we have on file in connection with the original study. I would emphasize these results are estimates obtained at a time when methods were still in developmental stages.

Please advise if we can provide further help.

Very truly yours,

Arthur H. Richards

Arthur H. Richards, Ph.D.
Research Scientist *IV*

Enc.: Data Table
Photocopies of EHC-2 Forms

cc: Dr. Fuhs

AR/pm

*Results of GTC & HPLC analysis
not previously rec'd.
from ADDY Y.*

NGINS000619202

Haloorganics (µg/L)

Sample #	1,1,1 Trichloroethane	Trichloroethylene	Tetrachloroethylene	
771700019 GAC 6 Plant 3 - NE Sledge drying bed	Groundwater	50	< 5	56
771700022 G+F 8 GW Plant 12, recharge basin at influent	Groundwater	5	45	22
771700024 GFC < 5 Plant 5 South recharge basin at influent in basin	Groundwater	3	< 5	3
771700027 GAC < 5 Beltway Groundwater, Plant 2, recharge basin 5, in basin at influent	Groundwater	6	< 5	6
771700029 Hooker 20		40	390*	400+
771700030 Hooker ND		ND	ND	

* Outside the linear range of the detector.

RECEIVED
MAY 26 1977ENVIRONMENTAL SCIENCE
REGION 1

NGINS000619203

JAN 5 1977 DIVISION OF LABORATORIES AND RESEARCH-ENVIRONMENTAL HEALTH CENTER
ALBANY, N.Y. 12201
REQUEST FOR ANALYSIS *ERC 11477-A*

FOR LAB USE ONLY
LAB ACCESS NO. 771700019: SAMPLE REC'D. 01 04 16:
YEAR MONTH DAY HOUR
TESTING PATTERN 99 NUMBER OF RECORDS 1:

PROGRAM CODE 520: NAME Bureau of Industrial Wastes

SAMPLING SITE NO. OF SAMPLES IN SHIPMENT
A. NUMBERED STATION-STA. (SOURCE) NO. _____:
B. UNNUMBERED SITE-DRAINAGE BASIN NO. 117: N.Y. GAZETTEER NO. 219,513:
LOCATION (CITY OR TOWN) DYER CITY COUNTY WARREN
LATITUDE 41° 11' 11" N LONGITUDE 72° 11' 11" W:
COMMON NAME, SUBWATERSHED, MILE POINT GRAMMAN, AEROL, PISCAT, CARRP, GROUNDWATER:
(75 CHAR. MAX.)

EXACT DESCRIPTION OF SITE PLANT, 3, NORTHEAST, SLUDGIE, D.R.
(50 CHARACTERS MAX.) UNIMPROVED, SANDY, 13:

TIME OF SAMPLING
GRAB/COMPOSITE FINISH 01 04 09:
MONTH DAY HOUR
COMPOSITE START _____ ELAPSED TIME: _____ DAYS _____ HOURS
COMPOSITE ACCORDING TO TIME: _____ ML. EVERY _____ MIN.
COMPOSITE ACCORDING TO FLOW: VOLUME REPRESENTED BY SAMPLE _____

TYPE OF SAMPLE (SELECT FROM LIST) 59: DESCRIPTION: MISC. TREATED WASTE

COMPLAINTS, OBSERVATIONS, REASONS FOR SUBMISSION
☐ ILLNESS ☐ IMPAIRED USAGE ☐ ROUTINE SURVEIL ☐ INTERRUPTION IN CHLORINATION
☐ TASTE/ODOR ☐ STANDARDS VIOL. ☒ SPECIAL STUDY ☐ REPAIRS IN DISTRIBUTION SYSTEM
☐ TURBIDITY ☐ FISHKILL ☐ NEW EQUIP. OR PROC. ☐ IMPROPER SHIELDING OF WELL
☐ COLOR 10-000 ☐ ALGAE, WEEDS ☐ EQUIP. FAILURE ☐ APPARENT SOURCE OF POLLUTION
☐ CORROSION: ☐ NATURAL DISASTER: ☐ OTHER: _____

REPORT RESULTS CO 2 RO 2 LPHE 2
TO (NO. OF COPIES): LHO 1 FED 0 A: ENTER 0, 1, OR 2
ATTENTION OF: 21-RUBIN:
SUBMITTED BY E.R. Smith (10 CHARACTERS MAX.) TITLE E. R. Smith

SOURCE OF POLLUTION
DISTANCE _____ TYPE _____
TYPE OF WELL CONST.: _____
CHARACTER OF SOIL: _____
OTHER OBSERV.: _____

DATA AND FIELD MEASUREMENTS
 CLOUD COVER (%) _____
 AIR TEMP. °C _____
 ODOR CODE _____
 ODOR INTENSITY _____
 TURBIDITY _____
 SUSP. MATTER _____
 FLOW M gal/day _____
 FLOW cu ft/sec _____
 WATER TEMP. °C _____
 pH (UNITS) _____
 COND. _____
 DISS. OXYGEN mg/l _____
 COLOR CODE _____
 BOTTOM DEPOSITS _____
 1-MUD 2-SLUDGE
 3-SILT 4-ROCKY

TREATMENT DATA
 PRECHLORINATION lb/M gal. _____
 POSTCHLORINATION lb/M gal. _____
 RESIDUAL CHLORINE mg/l _____
 COAGULANTS OR OTHER ADDITIONS:
 TYPE _____
 AMOUNT _____ UNITS _____
 1-LIME 4-POLYELECTROLYTE
 2-ALUM 5-AMMONIA
 3-IRON 6-OTHER

EHC-2

NGINS000619204

DIVISION OF LABORATORIES AND RESEARCH-ENVIRONMENTAL HEALTH CENTER
ALBANY, N.Y. 12201

REQUEST FOR ANALYSIS

FOR LAB USE ONLY	LAB ACCESS NO. <u>771700022</u>	SAMPLE REC'D. <u>06</u> <u>04</u> <u>16</u>
	TESTING PATTERN <u>9.9</u>	NUMBER OF RECORDS <u>1</u>

PROGRAM CODE <u>520</u>	NAME <u>Pavane of D. Antennal Warts</u>
SAMPLING SITE NO. OF SAMPLES IN SHIPMENT	A. NUMBERED STATION-STA. (SOURCE) NO. _____
	B. UNNUMBERED SITE-DRAINAGE BASIN NO. <u>117</u> : N.Y. GAZETTEER NO. <u>2453</u>
	LOCATION (CITY OR TOWN) <u>NYC</u> COUNTY <u>NEW YORK</u>
	LATITUDE <u>40</u> ° <u>45</u> ' <u>00</u> " N LONGITUDE <u>74</u> ° <u>00</u> ' <u>00</u> " W
COMMON NAME, SUBWATERSHED, MILE POINT <u>G.R.U.M.M.A.N. R.E.P.O.S.P.A.C.E.</u>	
<u>W.R.I.P. B.I.E.T.H.P.A.C.E. G.R.O.U.N.D.W.A.T.E.R.</u>	
(75 CHAR. MAX.)	

EXACT DESCRIPTION OF SITE (50 CHARACTERS MAX.)	<u>PLAIN - 12 RICHMOND BASIN 101</u>
	<u>UNIVERSITY STATION</u>

TIME OF SAMPLING	GRAB/COMPOSITE FINISH <u>01</u> <u>04</u> <u>10</u>
	MONTH DAY HOUR
	COMPOSITE START _____ ELAPSED TIME: _____
	DAY HOUR DAYS HOURS
	COMPOSITE ACCORDING TO TIME: _____ ML. EVERY _____ MIN.
	COMPOSITE ACCORDING TO FLOW: VOLUME REPRESENTED BY SAMPLE _____

TYPE OF SAMPLE (SELECT FROM LIST) <u>550</u>	DESCRIPTION: <u>MISC. TREATED WASTE</u>
--	---

COMPLAINTS, OBSERVATIONS, REASONS FOR SUBMISSION			
<input type="checkbox"/> ILLNESS	<input type="checkbox"/> IMPAIRED USAGE	<input type="checkbox"/> ROUTINE SURVEIL	<input type="checkbox"/> INTERRUPTION IN CHLORINATION
<input type="checkbox"/> TASTE/ODOR	<input type="checkbox"/> STANDARDS VIOL.	<input checked="" type="checkbox"/> SPECIAL STUDY	<input type="checkbox"/> REPAIRS IN DISTRIBUTION SYSTEM
<input type="checkbox"/> TURBIDITY	<input type="checkbox"/> FISHKILL	<input type="checkbox"/> NEW EQUIP. OR PROC.	<input type="checkbox"/> IMPROPER SHIELDING OF WELL
<input type="checkbox"/> COLOR	<input type="checkbox"/> ALGAE, WEEDS	<input type="checkbox"/> EQUIP. FAILURE	<input type="checkbox"/> APPARENT SOURCE OF POLLUTION
<input type="checkbox"/> CORROSION	<input type="checkbox"/> NATURAL DISASTER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER

REPORT RESULTS CO <u>2</u> RO <u>3</u> LPHE <u>3</u>	SOURCE OF POLLUTION
TO (NO. OF COPIES): LHO <u>0</u> FED <u>0</u> ENTER 0, 1, OR 2	DISTANCE _____ TYPE _____
ATTENTION OF: <u>21-PUBLIC WORKS</u>	TYPE OF WELL CONST.: _____
<u>C. P. Invalle</u> (110 CHARACTERS MAX.)	CHARACTER OF SOIL: _____
SUBMITTED BY _____	OTHER OBSERV. <u>Observed</u>
TITLE _____	

DATA AND FIELD MEASUREMENTS		TREATMENT DATA	
CLOUD COVER (%) _____	WATER TEMP. °C _____	PRECHLORINATION lb/M gal. _____	
AIR TEMP. °C _____	pH (UNITS) _____	POSTCHLORINATION lb/M gal. _____	
ODOR CODE _____	COND. _____	RESIDUAL CHLORINE mg/l _____	
ODOR INTENSITY _____	DISS. OXYGEN mg/l _____	COAGULANTS OR OTHER ADDITIONS:	
TURBIDITY _____	COLOR CODE _____	TYPE _____	
SUSP. MATTER _____	BOTTOM DEPOSITS _____	AMOUNT _____	UNITS
FLOW M gal/day _____	1-MUD 2-SLUDGE	1-LIME 4-POLYELECTROLYTE	
FLOW cu ft/sec _____	3-SILT 4-ROCKY	2-ALUM 5-AMMONIA	
		3-IRON 6-OTHER	

EHC-2

NGINS000619205

REQUEST FOR ANALYSIS

PROGRAM CODE		S, 2, D:		NAME		Bureau of Industrial Wastes					
SAMPLING SITE NO. OF SAMPLES IN SHIPMENT	A.		NUMBERED STATION-STA. (SOURCE) NO.								
	B.		UNNUMBERED SITE-DRAINAGE BASIN NO.		117:		N.Y. GAZETTEER NO.		29,53:		
	LOCATION		CITY OR TOWN		Oyster Bay				COUNTY		Nassau
	LATITUDE		43° 0' N		LONGITUDE		73° 0' W				
COMMON NAME, SUBWATERSHED, MILE POINT		P. H. M. A. N. B. S. P. O. S. P. A. C. E. F. I. L. P. R. E. T. I. L. P. A. S. E. - R. O. U. N. D. I. V. A. T. E. R. - S. I. R. I. F.									
(75 CHAR. MAX.)											

EXACT DESCRIPTION OF SITE P L A N T S , S O U T H , R E C L I A R G E , E . S . I
(50 CHARACTERS MAX.)
B , B , T , I , N , F L O W E R , I N , D E A T H , M :

TIME OF SAMPLING

GRAB/COMPOSITE FINISH 01 04 10 :
MONTH DAY HOUR

COMPOSITE START : ELAPSED TIME:
DAY HOUR DAYS HOURS

COMPOSITE ACCORDING TO TIME: ML. EVERY MIN.

COMPOSITE ACCORDING TO FLOW: VOLUME REPRESENTED BY SAMPLE

TYPE OF SAMPLE (SELECT FROM LIST) S, G: DESCRIPTION: MISC. TREATED WASTE

COMPLAINTS, OBSERVATIONS, REASONS FOR SUBMISSION			
<input type="checkbox"/> ILLNESS	<input type="checkbox"/> IMPAIRED USAGE	<input type="checkbox"/> ROUTINE SURVEIL	<input type="checkbox"/> INTERRUPTION IN CHLORINATION
<input type="checkbox"/> TASTE/ODOR	<input type="checkbox"/> STANDARDS VIOL.	<input checked="" type="checkbox"/> SPECIAL STUDY	<input type="checkbox"/> REPAIRS IN DISTRIBUTION SYSTEM
<input type="checkbox"/> TURBIDITY	<input type="checkbox"/> FISHKILL	<input type="checkbox"/> NEW EQUIP. OR PROC.	<input type="checkbox"/> IMPROPER SHIELDING OF WELL
<input type="checkbox"/> COLOR	<input type="checkbox"/> ALGAE, WEEDS	<input type="checkbox"/> EQUIP. FAILURE	<input type="checkbox"/> APPARENT SOURCE OF POLLUTION
<input type="checkbox"/> CORROSION :	<input type="checkbox"/> NATURAL DISASTER :	<input type="checkbox"/> OTHER :	<input type="checkbox"/> OTHER :

REPORT RESULTS CO 2 RO 2 LPHE 2
TO (NO. OF COPIES): LHO 0 FED 0 0: ENTER 0, 1, OR 2
ATTENTION OF: 1- R. B. P. L. N. 11
(10 CHARACTERS MAX.)
SUBMITTED BY 1- R. B. P. L. N. TITLE 1- R. B. P. L. N.

SOURCE OF POLLUTION
DISTANCE: _____ TYPE _____
TYPE OF WELL CONST.: _____
CHARACTER OF SOIL: _____
OTHER OBSERV. _____

FIELD MEASUREMENTS		TREATMENT DATA	
WATER TEMP. °C	_____	PRECHLORINATION	lb/M gal. _____
pH (UNITS)	_____	POSTCHLORINATION	lb/M gal. _____
COND.	_____	RESIDUAL CHLORINE	mg/l _____
DISS. OXYGEN mg/l	_____	COAGULANTS OR OTHER ADDITIONS:	
COLOR CODE	_____	TYPE	_____
BOTTOM DEPOSITS	_____	AMOUNT	_____
1-SAND	_____	1-LIME	4-POLYELECTROLYTE
2-SLUDGE	_____	2-ALUM	5-AMMONIA
3-MUD	_____	3-IRON	6-OTHER
4-ROCKY	_____		UNITS

NGINS000619206

REQUEST FOR ANALYSIS

FOR LAB
USE
ONLY

SAMPLING SITE	NO. OF SAMPLES IN SHIPMENT
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1
17	1
18	1
19	1
20	1
21	1
22	1
23	1
24	1
25	1
26	1
27	1
28	1
29	1
30	1
31	1
32	1
33	1
34	1
35	1
36	1
37	1
38	1
39	1
40	1
41	1
42	1
43	1
44	1
45	1
46	1
47	1
48	1
49	1
50	1
51	1
52	1
53	1
54	1
55	1
56	1
57	1
58	1
59	1
60	1
61	1
62	1
63	1
64	1
65	1
66	1
67	1
68	1
69	1
70	1
71	1
72	1
73	1
74	1
75	1
76	1
77	1
78	1
79	1
80	1
81	1
82	1
83	1
84	1
85	1
86	1
87	1
88	1
89	1
90	1
91	1
92	1
93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

EXACT DESCRIPTION OF SITE
(50 CHARACTERS MAX.)

TIME OF SAMPLINGTYPE OF SAMPLE (SELECT FROM LIST)COMPLAINTS, OBSERVATIONS, REASONS FOR SUBMISSION

REPORT RESULTS

DATA AND FIELD MEASUREMENTS

605 1977 DIVISION OF LABORATORIES AND RESEARCH-ENVIRONMENTAL HEALTH CENTER
ALBANY, N.Y. 12201
REQUEST FOR ANALYSIS FILE 114177 - K

FOR LAB USE ONLY	LAB ACCESS NO. 27 17 00039: SAMPLE REC'D. 01 04 16: YEAR LAB ACC. NO. MONTH DAY HOUR
	TESTING PATTERN 9.6 48M 513 RECORDS 1:

PROGRAM CODE 520: NAME Bureau of Industrial Wastes	
SAMPLING SITE NO. OF SAMPLES IN SHIPMENT	A. NUMBERED STATION-STA. (SOURCE) NO. _____:
	B. UNNUMBERED SITE-DRAINAGE BASIN NO. 117: N.Y. GAZETTEER NO. 12953:
	LOCATION (CITY OR TOWN) Oyster Bay COUNTY Nassau
	LATITUDE _____ N LONGITUDE _____ W:
COMMON NAME, SUBWATERSHED, MILE POINT HOOKER, CHEMICAL CO. K.P. NEW SOUTH RID. HICKSVILLE, GROUNDWATER	

EXACT DESCRIPTION OF SITE (50 CHARACTERS MAX.)	CONCRETE HOLDING TANK
--	-----------------------

TIME OF SAMPLING	GRAB/COMPOSITE FINISH 01 04 11: MONTH DAY HOUR
COMPOSITE START _____ ELAPSED TIME: _____ DAYS _____ HOURS	
COMPOSITE ACCORDING TO TIME: _____ ML. EVERY _____ MIN.	
COMPOSITE ACCORDING TO FLOW: VOLUME REPRESENTED BY SAMPLE _____	

TYPE OF SAMPLE (SELECT FROM LIST) 37: DESCRIPTION: MISC. LIQ WASTE
--

COMPLAINTS, OBSERVATIONS, REASONS FOR SUBMISSION			
<input type="checkbox"/> ILLNESS	<input type="checkbox"/> IMPAIRED USAGE	<input type="checkbox"/> ROUTINE SURVEIL	<input type="checkbox"/> INTERRUPTION IN CHLORINATION
<input type="checkbox"/> TASTE/ODOR	<input type="checkbox"/> STANDARDS VIOL.	<input checked="" type="checkbox"/> SPECIAL STUDY	<input type="checkbox"/> REPAIRS IN DISTRIBUTION SYSTEM
<input type="checkbox"/> TURBIDITY	<input type="checkbox"/> FISHKILL	<input type="checkbox"/> NEW EQUIP. OR PROC.	<input type="checkbox"/> IMPROPER SHIELDING OF WELL
<input type="checkbox"/> COLOR	<input type="checkbox"/> ALGAE, WEEDS	<input type="checkbox"/> EQUIP. FAILURE	<input type="checkbox"/> APPARENT SOURCE OF POLLUTION
<input type="checkbox"/> CORROSION	<input type="checkbox"/> NATURAL DISASTER	<input type="checkbox"/> OTHER	<input type="checkbox"/> OTHER

REPORT RESULTS CO 2 RO 2 LPHE 2 TO (NO. OF COPIES): LHO 0 FED 0 1: ENTER 0, 1, OR 2	SOURCE OF POLLUTION DISTANCE _____ TYPE _____ TYPE OF WELL CONST.: _____
ATTENTION OF: 2100 B.I.N. 11: c. J. Smith (10 CHARACTERS MAX.)	CHARACTER OF SOIL: _____ OTHER OBSERV.: _____
SUBMITTED BY _____	TITLE _____

DATA AND FIELD MEASUREMENTS		TREATMENT DATA	
CLOUD COVER (%) _____	WATER TEMP. °C _____	PRECHLORINATION lb/M gal. _____	
AIR TEMP. °C _____	pH (UNITS) _____	POSTCHLORINATION lb/M gal. _____	
ODOR CODE _____	COND. _____	RESIDUAL CHLORINE mg/l _____	
ODOR INTENSITY _____	DISS. OXYGEN mg/l _____	COAGULANTS OR OTHER ADDITIONS:	
TURBIDITY _____	COLOR CODE _____	TYPE _____	
SUSP. MATTER _____	BOTTOM DEPOSITS _____	AMOUNT _____	UNITS
FLOW M gal/day _____	1-MUD 2-SLUDGE	1-LIME 4-POLYELECTROLYTE	
FLOW cu ft/sec _____	3-SILT 4-ROCKY	2-ALUM 5-AMMONIA	
		3-IRON 6-OTHER	

EHC-2

NGINS000619208

EXACT DESCRIPTION OF SITE C.C.L. INC. TOWER, C.C.W. BOUN
(50 CHARACTERS MAX.) S.A.M.L. :

TYPE OF SAMPLE (SELECT FROM LIST) 34: DESCRIPTION: Misc. Liquid Waste

REPORT RESULTS CO 2 RO 3 LPHE 2
TO (NO. OF COPIES): LHO 0 FED 0: ENTER 0, 1, OR 2

ATTENTION OF: P. J. RORLIN
P. J. Rorlin (10 CHARACTERS MAX.)
SUBMITTED BY _____ TITLE _____
DISTANCE _____ TYPE _____
TYPE OF WELL CONST.: _____
CHARACTER OF SOIL: _____
OTHER OBSERV.: _____

NGINS000619209

1-15-5 (1/776)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233

RECEIVED

Part 2
Page 1 of 3

INDUSTRIAL CHEMICAL SURVEY - 1977

PART I

DIVISION OF FINE WATERS

BUREAU OF INDUSTRIAL PROGRAMS

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: INDUSTRIAL CHEMICAL SURVEY

COMPANY NAME GRUMMAN AEROSPACE CORPORATION		SIC CODE (if shown) 3721	OFFICE USE ONLY 47 77703
COMPANY MAILING ADDRESS Grumman Aerospace Corporation		CITY Bethpage	STATE New York
PLANT NAME (if different) Naval Industrial Reserve Plant, DOD #466		CONTACT NAME John Ohlmann, Pl. 30/Dept. 296	TELEPHONE AREA (516) 575-2385
PLANT ADDRESS (if different) Street Swan Pond Road		CITY Calverton	STATE N.Y.
PRINCIPAL BUSINESS OF PLANT Final Assembly and Flight Development Test		ZIP CODE 11714	ZIP CODE 11933

NOTE: (If parent company, give name and addresses of all divisions, subsidiaries, etc. located in New York State. A separate questionnaire is to be completed and submitted for each.)

non-fertile
1-30003APART II
Discharge Information

WATER	1. Does your plant discharge liquid wastes to a municipally owned sanitary sewer system? Name of System _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	2. Is your facility permitted to discharge liquid wastes under a State (SPDES) or Federal (NPDES) permit? Permit Number <u>0025453</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	3. Do you discharge liquid wastes in any other manner? Explain _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	If any of the above are "Yes": a. Do you discharge process or chemical wastes -- (i.e. water used in manufacturing including direct contact cooling water and scrubber water)? b. Do you discharge non-contact cooling water? c. Do you discharge collected storm drainage only? d. Do you discharge sanitary wastes only?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
AIR	1. Does your facility have sources of possible emissions to the atmosphere?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	2. Enter Location and Facility Code as shown on your Air Pollution Control Application for Permits and Certification (If applicable) <u>4730000664</u>	
SOLID WASTES	1. List Name and Address of Firm (Including yourself) removing wastes other than office and cafeteria refuse. Name: de Vito Cesspool Service Inc. Address: 19 Allen Blvd. E. Farmingdale New York 11735 Name: Thomas Paterson Inc. Address: 102 Third St. Brooklyn New York 11231	Active <input checked="" type="checkbox"/> Inactive <input type="checkbox"/>
	2. List Location(s) of Landfill(s) owned and used by your facility. 1. Riverhead Town Dump 2. _____	Active <input checked="" type="checkbox"/> Inactive <input type="checkbox"/>
PESTICIDES	1. Does this facility: Manufacture Pesticides or Pesticide Product Ingredients? Produce Pesticides or Pesticide Product Ingredients? Formulate Pesticides? Repackage Pesticides?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	2. EPA Establishment Number _____	

NGINS000619210